AMENDMENTS TO THE CLAIMS

Please amend the claims as follow. Insertions are shown underlined while deletions are ~~struck through~~ or [[double-bracketed].

1. (currently amended) Fine metal particles in the form of a dry powder, characterized in that

the fine metal particles in the form of a dry powder are free from any solvent,

an average particle size of the fine metal particles themselves is selected in the range of 1 to 20 nm,

the surface of the fine metal particles themselves is covered with one or more compounds selected from the group consisting of diamine compounds having an alkyl substituent on one of two amino groups, hydroxyamine compounds having an O-alkyl substituent, and monoamines containing a branched alkyl group, which diamine compounds, hydroxyamine compounds and monoamines have a boiling point of ~~100 °C or higher~~ from 150 °C to 300°C,

a covering amount of said one or more compounds is adjusted by selecting total of said one or more compounds in the range of 5 to 35 parts by mass based on 100 parts by mass of the fine metal particles themselves, and thus, the fine metal particles in the form of a dry powder are composed of the fine metal particles themselves and the one or more compounds; ~~and~~

~~the adjustment of said covering amount is carried out by the following treatment comprising steps of:~~

~~beforehand bringing said one or more compounds into contact with the surface of the fine metal particles themselves having an average particle size selected in the range of 1 to 20 nm, thereby once applying said one or more compounds through a coordinative bond with a metal element contained in the fine metal particles in an amount greater than the aimed covering amount in total of said one or more compounds based on 100 parts by mass of the fine metal particles themselves to form a covering layer thereof, and then preparing, as a starting material, a dispersion in which the fine metal particles having a covering layer of said one or more compounds are dispersed in a dispersion solvent comprising one or more organic solvents,~~

~~removing the organic solvent contained in the dispersion as a dispersion solvent under reduced pressure, thereby concentrating the dispersion,~~

~~adding, to the dispersion subjected to the treatment for concentration, one or more polar solvents in which said one or more compounds exhibit a higher solubility at room temperature~~

~~than that in the organic solvent, thereby dissolving excess of one or more compounds in said one or more polar solvents, and then separating fine metal particles in which the adjustment of the covering amount is attained by removing the excess of one or more compounds, as a solid phase component, from the obtained dispersion by filtration, and~~

~~evaporating the remaining one or more polar solvents at a temperature of 100 °C or lower to dry up,~~

wherein

a thickness of the covering layer formed with the adjusted covering amount is at least 0.5 nm or thicker, and selected in the range of 2/10 to 8/10 of the average particle size of the fine metal particles themselves~~, and~~

~~the one or more polar solvents are one or more polar solvents selected from the group consisting of alcohol solvents having a low boiling point of 80 °C or lower, ketone solvents having a low boiling point of 80 °C or lower and acetonitrile~~.

2. (original) The fine metal particles in the form of a dry powder according to claim 1, characterized in that

the fine metal particles themselves are fine metal particles of a metal species selected from the group consisting of gold, silver, copper, platinum, palladium, tin, nickel, aluminum, zirconium, titanium, iron and tungsten, or fine alloy particles comprising two or more metals selected from the metal species group.

3. (withdrawn-currently amended) Fine metal oxide particles in the form of a dry powder, characterized in that

the fine metal oxide particles in the form of a dry powder are free from any solvent,

the fine metal oxide particles themselves are fine particles that comprise fine metal particles as a core and a metal oxide film layer on the surface,

an average particle size of the particles having a metal oxide film layer on the surface themselves is selected in the range of 1 to 20 nm,

the surface of the fine metal oxide particles themselves is covered with one or more compounds selected from the group consisting of diamine compounds having an alkyl substituent on one of two amino groups, hydroxyamine compounds having an O-alkyl substituent, and monoamines containing a branched alkyl group, which diamine compounds, hydroxyamine compounds and monoamines have a boiling point of ~~100 °C or higher~~ from 150 °C to 300°C,

a covering amount of said one or more compounds is adjusted by selecting total of said one or more compounds in the range of 5 to 35 parts by mass based on 100 parts by mass of the fine metal oxide particles themselves, and thus, the fine metal oxide particles in the form of a dry powder are composed of the fine metal oxide particles themselves and the one or more compounds; and

the formation of said metal oxide film layer on the surface and the adjustment of the covering amount is carried out by the following treatment comprising steps of:

beforehand bringing said one or more compounds into contact with the surface of fine metal particles having an average particle size selected in the range of 1 to 20 nm which correspond to the fine metal oxide particles themselves, thereby once applying said one or more compounds through a coordinative bond with a metal element contained in the fine metal particles themselves in an amount greater than the aimed covering amount in total of said one or more compounds based on 100 parts by mass of the fine metal particles to form a covering layer thereof, and preparing, as a starting material, a dispersion in which the fine metal particles having a covering layer of said one or more compounds are dispersed in a dispersion solvent comprising one or more organic solvents,

wherein the dispersion in which the fine metal oxide particles having a covering layer formed therein, of which a metal oxide film layer on the surface is formed by surface oxidation of the fine metal particles upon preparation of the dispersion or later in the prepared dispersion, are dispersed is employed as a starting material,

removing the organic solvent contained in the dispersion as a dispersion solvent under reduced pressure, thereby concentrating the dispersion,

adding, to the dispersion subjected to the treatment for concentration, one or more polar solvents in which said one or more compounds exhibit a higher solubility at room temperature than that in the organic solvent, thereby dissolving excess of one or more compounds in said one or more polar solvents, and then separating fine metal oxide particles in which the adjustment of the covering amount is attained by removing the excess of one or more compounds, as a solid phase component, from the obtained dispersion by filtration, and

evaporating the remaining one or more polar solvents at a temperature of 100 °C or lower to dry up,

wherein

a thickness of the covering layer formed with the adjusted covering amount is at least 0.5 nm or thicker, and selected in the range of 2/10 to 8/10 of the average particle size of the fine metal particles~~, and~~

~~the one or more polar solvents are selected from the group consisting of alcohol solvents having a low boiling point of 80 °C or lower, ketone solvents having a low boiling point of 80 °C or lower and acetonitrile~~.

4. (withdrawn, previously presented) The fine metal oxide particles in the form of a dry powder according to claim 3, characterized in that

the fine metal particles themselves which correspond to the fine metal oxide particles are fine metal particles of a metal species selected from the group consisting of gold, silver, copper, platinum, palladium, tin, nickel, aluminum, zirconium, titanium, iron and tungsten, or fine alloy particles comprising two or more metals selected from the metal species group.

5. (withdrawn, previously presented) A process for forming a conductive wiring pattern comprising a sintered product layer of fine metal particles on a substrate, characterized in that

the sintered product layer is a layer that is obtained by bringing fine metal particles having an average particle size selected in the range of 1 to 20 nm into contact with each other and sintering the particles by heating at a temperature no higher than 350°C, and

the process comprises the steps of:

forming a fine metal particle coating layer having the wiring pattern by dry applying the fine metal particles in the form of a dry powder claimed in claim 1 to the substrate using a solid binder resin, and

softening the solid binder resin contained in the fine metal particle coating layer in said treatment for heating up and simultaneously, performing the treatment for sintering the fine metal particles contained in the fine metal particle coating layer,

wherein, upon heating up in the baking treatment, the one or more compounds covering the surface of the fine metal particle are separated from the surface of the fine metal particle and dissolved in the softened binder resin, whereby surface contact of the fine metal particles is attained to sinter the fine metal particles with each other.

6. (withdrawn, previously presented) The process according to claim 5, characterized in that

the step of forming a fine metal particle coating layer having the wiring pattern by dry applying the fine metal particles in the form of a dry powder to the substrate using a solid binder resin is carried out

by the method of applying toner particles that are prepared by using the fine metal particles in the form of the dry powder as core particles and said solid binder resin as a resin layer for toner by means of an electrophotographic image printing method to form a toner layer having the wiring pattern on the substrate.

7. (withdrawn, previously presented) A process for forming a conductive wiring pattern comprising a sintered product layer of fine metal particles on a substrate, characterized in that

the sintered product layer is a layer that is obtained by bringing fine metal particles having an average particle size selected in the range of 1 to 20 nm into contact with each other under a reducing atmosphere and sintering the particles by heating at a temperature no higher than 350°C, and

the process comprises the steps of:

forming a fine metal oxide particle coating layer having the wiring pattern by dry applying fine metal oxide particles in the form of a dry powder according to claim 3 to the substrate using a solid binder resin,

allowing the fine metal oxide particles contained in the fine metal oxide particle coating layer to react with gas or vapor of a compound having reducing ability at the heating temperature under a reducing atmosphere, thereby reducing the fine metal oxide particles from their surface to the corresponding fine metal particles, and

softening the solid binder resin contained in the fine metal oxide particle coating layer in said treatment for heating up and simultaneously, performing the treatment for sintering the fine metal particles reduced in the reduction process,

wherein, upon heating in the baking process, the one or more compounds covering the fine metal oxide particle surface are separated from the fine metal oxide particle surface and dissolved in the softened binder resin, whereby surface contact of the fine metal particles is attained to sinter the fine metal particles with each other.

8. (withdrawn, previously presented) The process according to claim 7, characterized in that

the step of forming a fine metal oxide particle coating layer having the wiring pattern by dry applying fine metal oxide particles in the form of a dry powder to the substrate using a solid binder resin is carried out

by the method of applying toner particles that are prepared by using the fine metal oxide particles in the form of the dry powder as core particles and said solid binder resin as a resin layer for toner by means of an electrophotographic image printing method to form a toner layer having the wiring pattern on the substrate.

9. (withdrawn, currently amended) A process for preparing fine metal particles in the form of a dry powder, characterized in that

the fine metal particles in the form of a dry powder are free from any solvent,

an average particle size of the fine metal particles themselves are selected in the range of 1 to 20 nm,

the surface of the fine metal particles themselves is covered with one or more compounds selected from the group consisting of diamine compounds having an alkyl substituent on one of two amino groups, hydroxyamine compounds having an O-alkyl substituent, and monoamines containing a branched alkyl group, which diamine compounds, hydroxyamine compounds and monoamines have a boiling point of ~~100 °C or higher~~ from 150 °C to 300°C,

a covering amount of said one or more compounds is adjusted by selecting the total of said one or more compounds in the range of 5 to 35 parts by mass in based on 100 parts by mass of the fine metal particles themselves, and thus, the fine metal particles in the form of a dry powder are composed of the fine metal particles themselves and the one or more compounds; and

as for the step of adjustment of the covering amount, the process comprises the steps of:

beforehand bringing said one or more compounds into contact with the surface of the fine metal particles themselves having an average particle size selected in the range of 1 to 20 nm, thereby once applying said one or more compounds through a coordinative bond with a metal element contained in the fine metal particles in an amount greater than the aimed covering amount in total of said one or more compounds based on 100 parts by mass of the fine metal particles themselves to form a covering layer thereof, and preparing, as a starting material, a dispersion in which the fine metal particles having a covering layer of said one or more compounds are dispersed in a dispersion solvent comprising one or more organic solvents,

removing the organic solvent contained in the dispersion as a dispersion solvent under reduced pressure, thereby concentrating the dispersion,

adding, to the dispersion subjected to the treatment for concentration, one or more polar solvents in which said one or more compounds exhibit a higher solubility at room temperature than that in the organic solvent, thereby dissolving excess of one or more compounds in said one or more polar solvents, and then separating fine metal particles in which the adjustment of the covering amount is attained by removing the excess of one or more compounds, as a solid phase component, from the obtained dispersion by filtration, and

performing the treatment of evaporating the remaining one or more polar solvents at a temperature of 100 °C or lower to dry up,

wherein

a thickness of the covering layer formed with the adjusted covering amount is at least 0.5 nm or thicker, and selected in the range of 2/10 to 8/10 of the average particle size of the fine metal particles, and

the one or more polar solvents are selected from the group consisting of alcohol solvents having a low boiling point of 80 °C or lower, ketone solvents having a low boiling point of 80 °C or lower and acetonitrile.

10. (withdrawn) The process according to claim 9, characterized in that

said fine metal particles themselves are fine metal particles of a metal species selected from the group consisting of gold, silver, copper, platinum, palladium, tin, nickel, aluminum, zirconium, titanium, iron and tungsten, or fine alloy particles comprising two or more metals selected from the metal species group.

11. (withdrawn, currently amended) A process for preparing fine metal oxide particles in the form of a dry powder, characterized in that

the fine metal oxide particles in the form of a dry powder are free from any solvent,

the fine metal oxide particles themselves are fine particles that comprise fine metal particles as a core and a metal oxide film layer on the surface,

an average particle size of the fine metal oxide particles having a metal oxide film layer on the surface themselves is selected in the range of 1 to 20 nm,

the surface of the fine metal oxide particles themselves is covered with one or more compounds selected from the group consisting of diamine compounds having an alkyl substituent

on one of two amino groups, hydroxyamine compounds having an O-alkyl substituent, and monoamines containing a branched alkyl group, which diamine compounds, hydroxyamine compounds and monoamines have a boiling point of ~~100 °C or higher~~ from 150 °C to 300°C, and

a covering amount of said one or more compounds is adjusted by selecting the total of said one or more compounds in the range of 5 to 35 parts by mass based on 100 parts by mass of the fine metal oxide particles themselves, so that the fine metal oxide particles in the form of a dry powder are composed of the fine metal oxide particles themselves and the one or more compounds; and

as for the step of formation of the metal oxide film layer on the surface and adjustment of the covering amount, the process comprises the steps of:

beforehand bringing said one or more compounds into contact with the surface of the fine metal particles having an average particle size selected in the range of 1 to 20 nm which correspond to the fine metal oxide particles, thereby once applying said one or more compounds through a coordinative bond with a metal element contained in the fine metal particles in an amount greater than the aimed covering amount in total of said one or more compounds based on 100 parts by mass of the fine metal particles to form a covering layer thereof, and preparing, as a starting material, a dispersion in which the fine metal particles having a covering layer of said one or more compounds are dispersed in a dispersion solvent comprising one or more organic solvents,

wherein the dispersion in which said fine metal oxide particles having a covering layer formed thereon, of which a metal oxide film layer on the surface is formed by surface oxidation of the fine metal particles upon preparation of the dispersion or later in the prepared dispersion, are dispersed is employed as a starting material,

removing the organic solvent contained in the dispersion as a dispersion solvent under reduced pressure, thereby concentrating the dispersion,

adding, to the dispersion subjected to the treatment for concentration, one or more polar solvents in which said one or more compounds exhibit a higher solubility at room temperature than that in the organic solvent, thereby dissolving excess of one or more compounds in said one or more polar solvents, and then separating fine metal oxide particles, in which the adjustment of the covering amount is attained by removing the excess of one or more compounds, as a solid phase component, from the obtained dispersion by filtration, and

performing the treatment of evaporating the remaining one or more polar solvents at a temperature of 100 °C or lower to dry up,

wherein

a thickness of the covering layer formed with the adjusted covering amount is at least 0.5 nm or thicker, and selected in the range of 2/10 to 8/10 of the average particle size of the fine metal particles, and

the one or more polar solvents are selected from the group consisting of alcohol solvents having a low boiling point of 80 °C or lower, ketone solvents having a low boiling point of 80 °C or lower and acetonitrile.

12. (withdrawn) The process according to claim 11, characterized in that

the fine metal particles themselves which correspond to the fine metal oxide particles are fine metal particles of a metal species selected from the group consisting of gold, silver, copper, platinum, palladium, tin, nickel, aluminum, zirconium, titanium, iron and tungsten, or fine alloy particles comprising two or more metals selected from the metal species group.

13. (withdrawn, previously presented) A process for forming a conductive wiring pattern comprising a sintered product layer of fine metal particles on a substrate, characterized in that

the sintered product layer is a layer that is obtained by bringing fine metal particles having an average particle size selected in the range of 1 to 20 nm into contact with each other and sintering the particles by heating at a temperature no higher than 350°C, and

the process comprises the steps of:

forming a fine metal particle coating layer having the wiring pattern by dry applying the fine metal particles in the form of a dry powder according to claim 1 to the substrate, and

melting said one or more compounds contained in the fine metal particle coating layer and constituting the covering layer on the surface of the fine metal particle in said treatment for heating up and simultaneously, performing the treatment for sintering the fine metal particles contained in the fine metal particle coating layer,

wherein, upon heating up in the baking treatment, the one or more compounds covering the surface of the fine metal particle are separated from the surface of the fine metal particle and melted with fusing with each other, whereby surface contact of the fine metal particles is attained to sinter the fine metal particles with each other.

14. (withdrawn, currently amended) A process for forming a conductive wiring pattern comprising a sintered product layer of fine metal particles on a substrate, characterized in that

the sintered product layer is a layer that is obtained by bringing fine metal particles having an average particle size selected in the range of 1 to 20 nm into contact with each other under a reducing atmosphere and sintering the particles by heating at a temperature no higher than 350°C, and

the process comprises the steps of:

forming a fine metal oxide particle coating layer having the wiring pattern by dry applying fine metal oxide particles in the form of a dry powder according to claim 3 to the substrate,

allowing the fine metal oxide particles contained in the fine metal oxide particle coating layer to react with gas or vapor of a compound having reducing ability at the heating temperature under a reducing atmosphere, thereby reducing the fine metal oxide particles from their surface to the corresponding fine metal particles, and

melting said one or more compounds contained in the fine metal oxide particle coating layer and constituting the covering layer on the fine metal oxide particle surface in said treatment for heating up and simultaneously, performing the treatment for sintering the fine metal particles reduced in the reduction process,

wherein, upon heating up in the baking treatment, the one or more compounds covering the fine metal oxide particle surface ~~is~~ are separated from the fine metal oxide particle surface and melted with fusing with each other, whereby surface contact of the fine metal particles is attained to sinter the fine metal particles with each other.

15. (currently amended) Fine metal particles in the form of a dry powder, characterized in that

the fine metal particles in the form of a dry powder are free from any solvent,

an average particle size of the fine metal particles themselves is selected in the range of 1 to 20 nm,

the surface of the fine metal particles themselves is covered with one or more carboxylic acids selected from the group consisting of long chain carboxylic acids having 8 or more carbon atoms in the form of linear carboxylic acid, which carbon atoms are chosen in the range of 8 to 18 carbon atoms,

a covering amount of said one or more carboxylic acids is adjusted by selecting the total of said one or more carboxylic acids in the range of 5 to 35 parts by mass based on 100 parts by mass of the fine metal particles themselves, and thus, the fine metal particles in the form of a dry powder are composed of the fine metal particles themselves and the one or more carboxylic acids;

~~the adjustment of the covering amount is carried out by the following treatment comprising steps of:~~

~~beforehand bringing said one or more carboxylic acids into contact with the fine metal particles themselves having an average particle size selected in the range of 1 to 20 nm, thereby once applying said one or more carboxylic acids in the form of carboxylic acid fixed to a metal atom on the surface contained in the fine metal particles by a Coulombic interaction or in the form of a carboxylate composed of a metal cation species and a carboxylic acid anion species in an amount greater than the aimed covering amount in total of said one or more carboxylic acids constituting the covering layer based on 100 parts by mass of the fine metal particles themselves to form a covering layer thereof, and preparing, as a starting material, a dispersion containing the fine metal particles having a carboxylic acid covering layer dispersed in a dispersion solvent comprising one or more organic solvents,~~

~~removing the organic solvent contained in the dispersion as a dispersion solvent under reduced pressure, thereby concentrating the dispersion,~~

~~adding, to the dispersion subjected to the treatment for concentration, one or more polar solvents in which said one or more carboxylic acids constituting the covering layer exhibit a higher solubility at room temperature than that in the organic solvent, thereby dissolving excess of one or more carboxylic acids in said one or more polar solvents, and separating fine metal particles in which the adjustment of the covering amount is attained by removing the excess of one or more carboxylic acids, as a solid phase component, from the obtained dispersion by filtration, and~~

~~evaporating the remaining one or more polar solvents at a temperature of 100 °C or lower to dry up,~~

wherein

a thickness of the covering layer formed with the adjusted covering amount is at least 0.5 nm or thicker, and selected in the range of 2/10 to 8/10 of the average particle size of the fine metal particles~~, and~~

~~the one or more polar solvents are selected from the group consisting of alcohol solvents having a low boiling point of 80 °C or lower, ketone solvents having a low boiling point of 80 °C or lower and acetonitrile.~~

16. (withdrawn, currently amended) Fine metal oxide particles in the form of a dry powder, characterized in that

the fine metal oxide particles in the form of a dry powder are free from any solvent,

the fine metal oxide particles themselves are fine particles that comprise fine metal particles as a core and a metal oxide film layer on the surface,

an average particle size of the particles having a metal oxide film layer on the surface themselves is selected in the range of 1 to 20 nm,

the surface of the fine metal oxide particles themselves is covered with one or more carboxylic acids selected from the group consisting of long chain carboxylic acids having 8 or more carbon atoms in the form of linear carboxylic acid, which carbon atoms are chosen in the range of 8 to 18 carbon atoms,

a covering amount of said one or more carboxylic acids is adjusted by selecting the total of said one or more carboxylic acids in the range of 5 to 35 parts by mass based on 100 parts by mass of the fine metal oxide particles themselves, ~~and~~ so that the fine metal oxide particles in the form of a dry powder are composed of the fine metal particles themselves and the one or more carboxylic acids;

~~the formation of the metal oxide film layer on the surface and the adjustment of the covering amount is carried out by the following treatment comprising steps of:~~

~~beforehand bringing said one or more carboxylic acids into contact with the surface of the fine metal particles having an average particle size selected in the range of 1 to 20 nm which correspond to the fine metal oxide particles, thereby once applying said one or more carboxylic acids in the form of carboxylic acid fixed to a metal atom on the surface contained in the fine metal particles by a Coulombic interaction or in the form of a carboxylate composed of a metal cation species and a carboxylic acid anion species in an amount greater than the aimed covering amount in total of said one or more carboxylic acids constituting the covering layer based on 100 parts by mass of the fine metal particles to form a covering layer thereof, and preparing, as a starting material, a dispersion containing the fine metal particles having a carboxylic acid covering layer dispersed in a dispersion solvent comprising one or more organic solvents,~~

~~wherein the dispersion containing the fine metal oxide particles having a covering layer, on which a metal oxide film layer is formed on the surface by surface oxidation of the fine metal particles upon preparation of the starting material or later in the prepared dispersion is prepared as a starting material,~~

~~removing the organic solvent contained in the dispersion as a dispersion solvent under reduced pressure, thereby concentrating the dispersion,~~

~~adding, to the dispersion subjected to the treatment for concentration, one or more polar solvents in which said one or more carboxylic acids constituting the covering layer exhibit a higher solubility at room temperature than that in the organic solvent, thereby dissolving excess of one or more carboxylic acids in said one or more polar solvents, and then separating fine metal oxide particles in which the adjustment of the covering amount is attained by removing the excess of one or more carboxylic acids, as a solid phase component, from the obtained dispersion by filtration, and~~

~~evaporating the remaining one or more polar solvents at a temperature of 100 °C or lower to dry up.~~

wherein

a thickness of the covering layer formed with the adjusted covering amount is at least 0.5 nm or thicker, and selected in the range of 2/10 to 8/10 of the average particle size of the fine metal particles, ~~and~~

~~the one or more polar solvents are selected from the group consisting of alcohol solvents having a low boiling point of 80 °C or lower, ketone solvents having a low boiling point of 80 °C or lower and acetonitrile~~.

17. (withdrawn, previously presented) A fine metal particle dispersion comprising fine metal particles uniformly dispersed in a dispersion solvent, characterized in that

the fine metal particles are uniformly dispersed in the dispersion solvent by re-dispersing the fine metal particles in the form of a dry powder claimed in claim 1 in the dispersion solvent,

the dispersion solvent constituting the fine metal particle dispersion after re-dispersion is a high boiling point solvent having a boiling point of 100°C or higher but 300°C or lower, and

the fine metal particle dispersion has

(i) a viscosity adjusted in the range of 50 to 200 Pa□s (25°C) by selecting the content of the dispersion solvent in the fine metal particle dispersion in the range of 3 to 25 parts by mass based on 100 parts by mass of the fine metal particles, or

(ii) a viscosity adjusted in the range of 5 to 30 mPa□s (25°C) by selecting the content of the dispersion solvent in the fine metal particle dispersion in the range of 30 to 80 parts by mass based on 100 parts by mass of the fine metal particles.

18. (withdrawn, previously presented) The fine metal particle dispersion according to claim 17, characterized in that

the fine metal particle dispersion has viscosity (i), and

the content of the dispersion solvent in the fine metal particle dispersion is selected in the range of 5 to 20 parts by mass based on 100 parts by mass of the fine metal particles.

19. (cancelled)

20. (withdrawn, previously presented) The fine metal particle dispersion according to claim 17, characterized in that

the fine metal particle dispersion has viscosity (ii), and

the content of the dispersion solvent in the fine metal particle dispersion is selected in the range of 40 to 80 parts by mass based on 100 parts by mass of the fine metal particles.

21. (withdrawn, previously presented) A fine metal oxide particle dispersion comprising fine metal oxide particles uniformly dispersed in a dispersion solvent, characterized in that

the fine metal oxide particles are uniformly dispersed in the dispersion solvent by re-dispersing the fine metal oxide particles in the form of a dry powder according to claim 3 in the dispersion solvent,

the dispersion solvent constituting the fine metal oxide particle dispersion after re-dispersion is a high boiling point solvent having a boiling point of 100°C or higher but 300°C or lower, and

the fine metal oxide particle dispersion has

(i) a viscosity adjusted in the range of 50 to 200 Pa□s (25°C) by selecting the content of the dispersion solvent in the fine metal oxide particle dispersion in the range of 3 to 25 parts by mass based on 100 parts by mass of the fine metal oxide particles, or

(ii) a viscosity adjusted in the range of 5 to 30 mPa□s (25°C) by selecting the content of the dispersion solvent in the fine metal oxide particle dispersion in the range of 30 to 70 parts by mass based on 100 parts by mass of the fine metal oxide particles.

22. (withdrawn, previously presented) The fine metal oxide particle dispersion according to claim 21, characterized in that

the fine metal oxide particle dispersion has viscosity (i), and

the content of the dispersion solvent in the fine metal oxide particle dispersion is selected in the range of 3 to 15 parts by mass based on 100 parts by mass of the fine metal oxide particles.

23. cancelled

24. (withdrawn, previously presented) The fine metal oxide particle dispersion according to claim 21, characterized in that

the fine metal oxide particle dispersion has viscosity (ii), and

the content of the dispersion solvent in the fine metal oxide particle dispersion is selected in the range of 40 to 65 parts by mass based on 100 parts by mass of the fine metal oxide particles.

25. (withdrawn, previously presented) A process for forming a conductive wiring pattern comprising a sintered product layer of fine metal particles on a substrate, characterized in that

the sintered product layer is a layer that is obtained by bringing fine metal particles having an average particle size selected in the range of 1 to 20 nm into contact with each other and sintering the particles by heating at a temperature no higher than 350 □C, and

the process comprises the steps of:

forming a fine metal particle dispersion coating layer having the wiring pattern by applying, to the substrate, the fine metal particle dispersion using a high boiling point solvent as a dispersion solvent according to claim 17, and

evaporating and removing the high boiling point solvent contained in the fine metal particle dispersion coating layer in said treatment for heating up and simultaneously, performing the treatment for sintering the fine metal particles contained in the fine metal particle dispersion coating layer,

wherein, upon heating up in the baking treatment, the one or more compounds covering the surface of the fine metal particle are separated from the surface of the fine metal particle,

whereby surface contact of the fine metal particles is attained to sinter the fine metal particles with each other.

26. (withdrawn) The process for forming a conductive wiring pattern according to claim 25, characterized in that

the fine metal particles themselves contained in the fine metal particle dispersion are fine metal particles of a metal species selected from the group consisting of gold, silver, copper, platinum, palladium and nickel, or fine alloy particles comprising two or more metals selected from the metal species group.

27. (withdrawn, previously presented) A process for forming a conductive wiring pattern comprising a sintered product layer of fine metal particles on a substrate, characterized in that

the sintered product layer is a layer that is obtained by bringing fine metal particles having an average particle size selected in the range of 1 to 20 nm into contact with each other and sintering the particles by heating at a temperature no higher than 350 □C, and

the process comprises the steps of:

forming a fine metal oxide particle dispersion coating layer having the wiring pattern by applying, to the substrate, the fine metal oxide particle dispersion using a high boiling point solvent as a dispersion solvent according to claim 21, and

allowing the fine metal oxide particles contained in the fine metal oxide particle coating layer to react with gas or vapor of a compound having reducing ability at the heating temperature under a reducing atmosphere, thereby reducing the fine metal oxide particles from their surface to the corresponding fine metal particles,

evaporating the high boiling point solvent contained in the fine metal oxide particle dispersion coating layer in said treatment for heating up and simultaneously, performing the treatment for sintering the fine metal particles reduced in the reduction process,

wherein, upon heating up in the baking treatment, the one or more compounds covering the fine metal oxide particle surface are separated from the fine metal oxide particle surface and evaporated with the high boiling point solvent, whereby surface contact of fine metal particles is attained to sinter the fine metal particles with each other.

28. (withdrawn) The process for forming a conductive wiring pattern according to claim 27, characterized in that

the fine metal particles themselves which correspond to the fine metal oxide particles contained in the fine metal particle dispersion are fine metal particles of a metal species selected from the group consisting of silver, copper and nickel, or fine alloy particles comprising two or more metals selected from the metal species group.

29. (previously presented) The fine metal particles in the form of a dry powder according to claim 1,

wherein said one or more compounds are selected from the group consisting of dibutylaminopropylamine, bis-(2-ethylhexyl)aminopropylamine, butoxypropylamine, 2-ethylhexyloxypropylamine, bis-2-ethylhexylamine and 2-ethylhexylamine.

30. (withdrawn, previously presented) The fine metal oxide particles in the form of a dry powder according to claim 3,

wherein said one or more compounds are selected from the group consisting of dibutylaminopropylamine, bis-(2-ethylhexyl)aminopropylamine, butoxypropylamine, 2-ethylhexyloxypropylamine, bis-2-ethylhexylamine and 2-ethylhexylamine.

31. (withdrawn, previously presented) The process according to claim 7,

wherein said one or more compounds are selected from the group consisting of dibutylaminopropylamine, bis-(2-ethylhexyl)aminopropylamine, butoxypropylamine, 2-ethylhexyloxypropylamine, bis-2-ethylhexylamine and 2-ethylhexylamine.

32. (withdrawn, previously presented) The process according to claim 11,

wherein said one or more compounds are selected from the group consisting of dibutylaminopropylamine, bis-(2-ethylhexyl)aminopropylamine, butoxypropylamine, 2-ethylhexyloxypropylamine, bis-2-ethylhexylamine and 2-ethylhexylamine.

33. (withdrawn, previously presented) The process according to claim 13,

wherein said one or more compounds are selected from the group consisting of dibutylaminopropylamine, bis-(2-ethylhexyl)aminopropylamine, butoxypropylamine, 2-ethylhexyloxypropylamine, bis-2-ethylhexylamine and 2-ethylhexylamine.

34. (withdrawn, previously presented) A process according to claim 14,

wherein said one or more compounds are selected from the group consisting of dibutylaminopropylamine, bis-(2-ethylhexyl)aminopropylamine, butoxypropylamine, 2-ethylhexyloxypropylamine, bis-2-ethylhexylamine and 2-ethylhexylamine.

35. (previously presented) The fine metal particles in the form of a dry powder according to claim 15,

wherein said one or more carboxylic acids are elected from the group consisting of lauric acid, myristic acid, palmitic acid and stearic acid.

36. (withdrawn, previously presented) The fine metal oxide particles in the form of a dry powder according to claim 16

wherein said one or more carboxylic acids are selected from the group consisting of lauric acid, myristic acid, palmitic acid and stearic acid.

37. (withdrawn, previously presented) The fine metal particle dispersion according to claim 17,

wherein said one or more compounds are selected from the group consisting of dibutylaminopropylamine, bis-(2-ethylhexyl)aminopropylamine, butoxypropylamine, 2-ethylhexyloxypropylamine, bis-2-ethylhexylamine and 2-ethylhexylamine.

38. (withdrawn, previously presented) A fine metal oxide particle dispersion according to claim 21,

wherein said one or more compounds are selected from the group consisting of dibutylaminopropylamine, bis-(2-ethylhexyl)aminopropylamine, butoxypropylamine, 2-ethylhexyloxypropylamine, bis-2-ethylhexylamine and 2-ethylhexylamine.

39. (withdrawn, previously presented) A process according to claim 25,

wherein said one or more compounds are selected from the group ~~of~~ consisting of dibutylaminopropylamine, bis-(2-ethylhexyl)aminopropylamine, butoxypropylamine, 2-ethylhexyloxypropylamine, bis-2-ethylhexylamine and 2-ethylhexylamine.

40. (withdrawn, previously presented) A process according to claim 27,

wherein said one or more carboxylic acids are selected from the group consisting of lauric acid, myristic acid, palmitic acid and stearic acid.